Reynolds officials deal with toxic mess

The school district claims it did not know the potential for danger from PCBs when electrical fixtures were replaced

Sunday, July 16, 2000

By Wendy Y. Lawton of The Oregonian staff

TROUTDALE -- The Reynolds School District botched a program to remove thousands of light fixtures in its schools, potentially jeopardizing the health of 10,000 students and employees, violating environmental regulations and triggering state and federal investigations.

» **Labs find PCBs hurt animals** (7/16/00)

Now, after whistle-blowers prompted an inspection, taxpayers are paying nearly $400,000 to clean nearly 2,000 fixtures contaminated with toxic chemicals known as PCBs. The district also faces possible fines by the U.S. Environmental Protection Agency and the Oregon Occupational Safety and Health Division.

Reynolds School District officials and the EPA agree that the missteps started in 1995 after thousands of ballasts, or the electric hearts in fluorescent light fixtures, were replaced at 12 schools.

Workers left spills of PCBs inside the fixtures for as long as four years. Some ballasts with PCB levels hundreds or thousands of times greater than federal safety limits were stored in work areas and in barrels outdoors. Little paperwork tracked the hazardous compounds.

Now that they are aware of the violations, school district leaders said, they are trying to do the right thing.

"I'm amazed at the implications of this," said Reynolds School Board Chairwoman Renee Sessler. "But the district is responding in an ethical way."

Problems beyond Portland

Problems with PCBs, potential cancer-causing agents long banned by the government, aren't limited to this district perched on Portland's eastern edge.

The Reynolds inspection was prompted by PCB mishandling uncovered in the West Linn-Wilsonville School District last year. Looking for similar problems, the EPA has checked schools in Spokane and Fairbanks, Alaska, since February as part of a program of random inspections at schools in Oregon, Washington, Idaho and Alaska.

In Spokane, the EPA found "extensive" PCB leaks in light fixtures, especially in older schools, said Daniel Duncan, regional PCB program manager for the agency. Spokane Public Schools officials said about 20 to 30 leaks were found and that cleanup is under way.

Results aren't back from the Fairbanks inspections, Duncan said. Agency checks will continue into next year.

Duncan thinks more violations will surface. "This problem isn't prevalent in one school district," he said, "or in one state."

EPA officials cite several reasons why this is true.

A generation behind

One is that PCBs, short for polychlorinated biphenyls, were a popular insulator and coolant used in fluorescent lighting. The EPA banned production of PCBs in 1979. But the average American school was built in 1960, a generation before the ban. While many lights have been replaced, a lot of the vintage fixtures are still humming over the heads of students and staff.

They could be perfectly safe.

But trouble starts when the container holding PCBs blows out. Then the oily chemicals and the tar-and-sand compound packed around them can ooze onto the metal covering the ballasts.

Once exposed, the mixture can heat up and evaporate and can wind up in lungs, experts say. Or the molasseslike mess can drip onto cafeteria tables, desks or computers. Then it can spread onto hands and then wind up in mouths, although there is no evidence of this happening at Reynolds.

Virtually everyone has tiny doses of PCBs stashed in their fat, typically from breathing tainted air or eating contaminated meat or fish. But high levels of PCB exposure pack more chemicals into fat, pump more into the bloodstream and can make people sick.

Studies have shown that large doses of PCBs can cause liver damage and severe rashes. Although there is no conclusive data linking the chemicals to cancer in humans, research shows they can cause cancer, and even death, in animals.

The other hazardous material

Yet PCBs haven't received the kind of attention given to other hazardous materials such as asbestos or lead paint. EPA regional spokesman Bill Dunbar said little state and federal money goes toward PCB education and training.

And it's ignorance, Reynolds officials say, that put them in this pinch. They said they didn't know exactly how PCBs should be handled, cleaned or stored.

Although district leaders take responsibility for their mistakes, they also lay blame on the government.

"The EPA hasn't been involved in making guys like us aware of this stuff," said

Superintendent Hudson Lasher. "But they are now."

In fact, when the lighting removal was completed in late 1995 and early 1996, the district didn't document either the number of ballasts replaced, those that contained PCBs or how many were leaking.

Now, based on recent contractor bills, Reynolds officials estimate about 8,200 ballasts were replaced. But after looking over district paperwork, Bruce Long, the EPA environmental protection specialist who inspected the district, estimates that 15,000 were replaced. Records from the district's cleanup company show 1,486 light fixtures were scrubbed clean of PCBs in recent weeks. About 500 more are left to do.

In addition to the EPA's required cleanup, the district faces:

• An investigation by the Oregon OSHA over PCB handling. The district is providing PCB blood tests to custodians, groundskeepers and other maintenance employees, the people most likely to have direct contact with dismantled ballasts.

• A complaint filed by three Reynolds workers with the federal Occupational Safety and Health Administration in Seattle, which claims the trio were retaliated against by supervisors and administrators because of complaints and questions about PCBs.

• Sanctions ranging from a letter of advisement -- the EPA's version of a traffic warning --to criminal charges and monetary penalties of up to $27,500 per day per violation. Should Oregon OSHA find Reynolds failed to follow safety regulations, penalties can run as high as $70,000.

Another district's penalty

The EPA slapped the West Linn-Wilsonville district with a $328,300 penalty this year for its PCB violations. But Long considers the Reynolds case more severe because there were more spills in more schools, which sat for longer periods of time.

But Wayne Travillion, the Reynolds administrator in charge of the cleanup, is confident the district will be cleared of any wrongdoing and will be free from any fines. Travillion also said the district hasn't found any evidence of retaliation laid out in the whistle-blowers' complaint.

"We've done nothing but cooperate from the moment we've known something is wrong," he said. "Every step we've taken has been approved by the state, and we're marching right along."

Any fines would be painful.

An enrollment boom is straining Reynolds facilities, and a $56.6 million repair and building bond measure failed in May. On top of that, the district is $3.9 million in debt. To pay for the PCB cleanup, the district took out a 10-year loan.

Some employees say money -- not just a lack of knowledge -- played a role in handling of PCBs.

Barrels filled with ballasts removed nearly four years ago weren't hauled away for incineration until the past six months, one of the violations uncovered by the EPA. Larry Christian, Reynolds operations director, said money for the disposal was in his budget but was spent on other jobs, such as new roofs and ventilation systems.

"If we had an unlimited amount of money, we could've done it sooner," he said. "But we didn't realize we had a clock ticking. If we knew, we would've done something different."

The Reynolds project started with good intentions.

District officials found out about a Portland General Electric program offering rebates to schools and businesses that install energy-efficient lighting. So Reynolds signed up. Work began in December 1995.

That work has proved problematic. Acting on whistle-blower tips, EPA inspector Long arrived at Reynolds on Feb. 9, five years after the initial work. About 100 yards from the maintenance shop, Long found 11 metal drums sitting on wooden palettes. Long said he found about 900 ballasts inside, some floating in rainwater.

A sample of the ballasts showed 500 parts per million of PCBs, 250 times the legal limit. That puts the mixture in the EPA's "extremely high risk" category.

Visits to eight schools revealed other problems. Sampling of lights in Glenfair, Alder and Fairview elementary schools found no problems. But PCB leaks were uncovered in fixtures in Scott and Troutdale elementary schools, Reynolds and Lee middle schools and Reynolds High School.

Long said randomly chosen fixtures tested in classrooms, hallways and other areas turned up PCB concentrations of anywhere from 3 parts per million -- well within the EPA's "low risk" range -- to 2,300 parts per million -- which is off the "extremely high risk" chart.

The worst school by far, Long said, was Lee Middle School. In the building's old wing, he found PCBs pooled inside every fixture in every classroom and every hallway.

Long also visited Reynolds' two maintenance shops, where he found ballasts on floors. One pulled from a worker's truck registered the highest PCB level of all, 11,200 parts per million.

Under EPA regulations, PCB ballasts can only be stored in marked, tightly sealed drums for a maximum of one year. Yet hundreds had sat in unmarked barrels with vents in the lids or in employee work areas for as many as four years. Also, environmental rules demand that if PCB leaks occur, they must be immediately cleaned with special chemicals.

Darrell Waterman, supervising electrician for Continental Electric, the Gresham company that removed the ballasts, said he knew the cleanup rules. When asked why they weren't followed, Waterman said it wasn't a part of the job.

"We were strictly asked to change the ballasts," Waterman said, "and store them so they could be dumped."

Knowing what they know now, Travillion said, the district would have contracted with a special hazardous waste cleanup company.

Some Reynolds employees are also accusing the district of breaking the laws in other ways.

District electricians Dudley Spencer and James Smart -- the whistle-blowers who filed the complaint with the federal OSHA office along with safety officer Samuel Buntyn -- claim Reynolds employees working on the lighting project didn't wear the goggles, gloves and coveralls Oregon OSHA recommends as a minimum for that kind of job.

Christian, the Reynolds operations director, said he couldn't recall what workers wore at the time, except for gloves. "Worker bees don't want to protect themselves," he said. "You have to force them."

The whistle-blowers also claim ballasts were left sitting in school storage rooms or closets for as long as two years. After the ballasts were hauled to a garage and storage shed, the whistle-blowers allege that the ballasts, some leaking, sat in 3-foot-high stacks that workers passed each day.

But Spencer said he's not as concerned about the health of employees as he is the health of children. "We've had kids exposed," he said. "It doesn't matter if it's a little bit or a bunch; you don't endanger kids."

Spencer and other whistle-blowers also charge that David Kautz, Reynolds' facilities coordinator, told building crews to throw ballasts into school trash bins, in which they were hauled to landfills. Four other Reynolds employees also claim Kautz ordered the ballasts dumped and they either did so or saw others toss them.

Federal and state laws require that materials containing PCBs either be decontaminated or sent for storage or incineration at a hazardous waste facility.

Kautz said he told workers to toss out ballasts but only those with "No PCBs" stickers on them. "I absolutely did not ask people to throw PCBs away," Kautz said. Parts were quickly picked up from schools and sorted by a groundskeeper, he said, with the PCB ballasts sealed in drums.

Kautz points to district orders he signed in 1997 to remove 38 barrels of ballasts. But they never left district property. Kautz said he isn't sure why but suspects there wasn't money to pay for the shipment.

Scientists say there are too many factors -- from the length of time spent breathing polluted air to the amount of chemical contact on skin -- to determine whether anyone in Reynolds will get sick.

Karen Larson, an environmental health scientist and toxicologist with the U.S. Agency for Toxic Substances Disease Registry in Seattle, doubts that Reynolds children and school staff were harmed.

Larson, who served as a consultant in the West Linn-Wilsonville PCB case, said it takes relatively large doses of pure PCBs to cause serious side effects in humans.

Converting data from a PCB study on rats, Larson calculated that a 158-pound adult would have to eat one-sixth of a teaspoon of the chemicals over a weeks' time before body changes such as an enlarged liver might surface. For a 50-pound child, Larson said, it would take one-20th of a teaspoon eaten over a week to prompt similar effects.

Unlike the West Linn-Wilsonville inspection, which turned up PCB leaks on books, desks and carpets in one elementary school, evidence of only one PCB drip -- in the gym at Scott Elementary School -- was found in Reynolds. When Long went back to test the spot, he said, the floor had been cleaned.

Reynolds offered blood tests last month to 69 operations and maintenance workers. Working nights since April, cleanup crews wearing synthetic suits and respirators have been scrubbing fixtures and removing PCB ballasts from 15 district buildings. School officials say they're confident that every site will be cleaned by Aug. 4, the EPA-mandated deadline.

For its part, the EPA is trying to better educate schools. Packets of information about PCB risks and regulations were sent to 1,700 Northwest school superintendents in February, right around the time inspections started.

Duncan, the EPA program chief, said not knowing the rules can't be an excuse for breaking them.

"PCBs were banned in 1979," he said. "There isn't a good reason for not complying with the law."

You can reach Wendy Lawton at 503-294-5019 or by e-mail at wendylawton@news.oregonian.com.

Back